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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/091,805 12/10/98 NAKATA

T MATS:006

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MM91/0508

EXAMINER

NGUYEN, T

ART UNIT

PAPER NUMBER

2832

DATE MAILED:

05/08/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
09/091,805

Applicant(s)  
Nakata et al.

Examiner  
Tuyen T. Nguyen

Art Unit  
2832



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Feb 12, 2001
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above, claim(s) 2, 6, 8, 9, 11, 12, 14-16, 21-28, 30, and 32-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-5, 7, 10, 13, 17-20, 29, and 31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Dec 10, 1998 is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some\* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 16) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 7 20) ☐ Other:

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## **DETAILED ACTION**

### ***Election/Restriction***

1. Applicant's election without traverse of claims 1, 3, 4, 5, 7, 10, 13, 17-20, 29 and 31 in Paper No. 10 is acknowledged.
2. Claims 2, 6, 8-9, 11-12, 14-16, 21-28, 30 and 32-39 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 10.

### ***Priority***

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Drawings***

4. Figures 47-51 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).
5. The drawings are objected to because cut-away view of insulative portion, for example terminal base 24 of figure 5, should be cross-hatched as such. Correction is required.

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*Specification*

6. The disclosure is objected to because of the following informalities:

Applicant's response to the specification of page 8, line 12 is unclear therefore the amendment has not been entered.

Appropriate correction is required.

*Claim Rejections - 35 USC § 112*

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1, 3, 4, 5, 7, 10, 13, 17-20, 29 and 31, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, applicant should clarify the structure and location of the notch of the common magnetic yoke. From the figures and specification, the second magnetic core [40] does not have the notch. Applicant should clarify. Claims 3, 4, 5, 7, 10, 13, 17-20, 29 and 31 inherit the defect of the parent claim.

Regarding claim 10, applicant states that the "thickness of said second magnetic core is 65-90% that of a thickness of said common magnetic yoke..." From the specification, see page 8, lines 11-14, this does not appear to be the case. Applicant should clarify.

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Regarding claim 20, applicant should clarify what is intended by "a thickness deviation."

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims ~~1~~, 3, 4, 5, 7, 10, 13, 29, and 31 as best understood in view of the rejection under 35 U.S.C. 112 second paragraph, <sup>are</sup> ~~is~~ rejected under 35 U.S.C. 102(b) as being anticipated by applicant admitted prior art of figure 47.

The applicant admitted prior art of figure 47 discloses a choke coil comprising:

- a closing ferrite magnetic core including:

- a first E-shaped magnetic core [10] having a center magnetic leg [7], outer magnetic legs [8], and a common magnetic yoke [9]; wherein the center magnetic leg has a circle cross section; and

- a second E-shaped magnetic core [10] in contact with the first magnetic core.

- a magnetic gap provided between the center magnetic leg of the first magnetic core and the second magnetic core;

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- a circle-shaped coreless coil [2] including a plate-type wire comprising a flat type wire [1], wherein the coreless coil is disposed around the center magnetic leg and separated therefrom by an insulating layer [11];

- additional insulating layer [11] provided between the coreless coil and the closing magnetic core; and

- inside and outside plate type terminals [5, 6] respectively coupled to inside and outside ends [3, 4] of the plate-type coreless coil, wherein the terminals is led out side of the closing magnetic core through an opening provided between the first and second magnetic core.

***Claim Rejections - 35 USC § 103***

11. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant admitted prior art of figure 47 in view of Mitsui et al. [US 4,352,080].

The applicant admitted prior art of figure 47 discloses the instant claimed invention except for specifics structure of the insulating layer cooperate with the common magnetic yoke of the closing magnetic core.

Mitsui et al. discloses a ferrite core and bobbin structure for a choke coil comprising:

- a pair of E-shaped magnetic cores [10], wherein each of the magnetic core [10] comprising a circular boss [12], a pair of outer walls [14, 16] and a pair tapered of base plates [18, 20] with a notch [26] formed therebetween; and

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- a bobbin [30] including a cylindrical pipe [30a] and a pair of flange [30b] , wherein the upper flange has a pair of walls [30b'] and the lower flange having a projection [30c] and a pair of terminal base plate [30d], wherein the cylindrical pipe engages the circular boss of the magnetic core.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use core/bobbin design of Mitsui et al. in applicant admitted prior art of figure 47 for the purpose of facilitating manufacturing of the device.

Regarding claim 20, the applicant admitted prior art of figure 47 in view of Mitsui et al. discloses the instant claimed invention except for the cylindrical pipe includes *a thickness deviation*.

It would have been an obvious matter of design choice, absent evidence of criticality shown in the present invention and the lack of implicit or explicit limit to a specific design in the prior art, to include *a thickness deviation* for the cylindrical pipe of the applicant admitted prior art of figure 47, as modified, since applicant has not disclosed that a thickness deviation solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with thickness of the cylindrical pipe of the prior art.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Tuyen T. Nguyen whose telephone number is (703) 308-0821.

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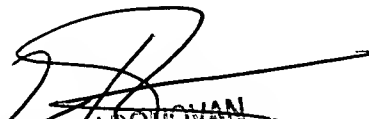
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Michael Gellner, can be reached at (703)308-1721. The fax number for this Group is (703)305-7724.

Any inquiry of a general nature or relating to the status of this application of proceeding should be directed to the Group receptionist whose telephone number is (703)308-0956.

TTN *FTN*

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May 4, 2001

  
LINCOLN DONOVAN  
PRIMARY EXAMINER  
CRC 12 2100